EXHIBIT CK

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Ex. C –Infringement Contention Chart: U.S. Patent No. 10,469,966 HIGHLY CONFIDENTIAL - SOURCE CODE - ATTORNEYS' EYES ONLY

Claim 1	Accused Instrumentalities
Claim 1 [1.0] A computing device comprising:	Google's "Cast" technology enables Cast-enabled media players to be included in a "speaker group" "for synchronous music throughout the home." These Cast-enabled media players include Google's own Cast-enabled media players, such as the Home Mini, Nest Mini, Home, Home Max, Home Hub, Nest Hub, Nest Hub Max, Nest Wifi Point, Chromecast, Chromecast Audio, Chromecast Ultra, Chromecast with Google TV, and Nest Audio media players, as well as various other third-party media players with built-in Cast functionality. See, e.g., https://store.google.com/us/product/google_home_max?hl=en-US; https://store.google.com/us/product/chromecast_google_tv_compare?hl=en-US; https://www.google.com/chromecast/built-in/audio/. To facilitate this functionality, the Google Home app allows a user to "[c]reate and manage speaker groups" from the user's smartphone, tablet, or computer device, as well as to "cast" to a previously-created "speaker group" from the user's smartphone, tablet, or computer device, which causes the "speaker group" to be invoked. https://support.google.com/googlenest/answer/7174267?co=GENIE.Platform%3DAndroid&hl=en. In addition, there are many other Cast-enabled Android, iOS, Chrome, or browser-based apps that allow a user to "cast" to a previously-created "speaker group" (and thereby cause the "speaker group" to be launched) using the user's smartphone, tablet, or computer device, including certain of Google's own Cast-enabled apps (e.g., YouTube Music app, the Google Play Music app, the Google Podcasts app, etc.) as well as certain third-party Cast-enabled apps (e.g., the Spotify app), accessed via an app store or Chromecast-enabled site URL. The Google Home app, either alone or together with one or more of these other Cast-enabled apps, can be installed and run on any smartphone, tablet, or computer device that supports Android, iOS, Chrome apps, or browser-based apps, including Google's own "Pixel" smartphone, tablet, and computer devices (e.g., the Pixel 3, Pixel 3
	XL, Pixel 3a, Pixel 3a XL, Pixel 4, Pixel 4 XL, Pixel 4a, Pixel 4a (5G), Pixel 5, Pixel 5a (5G), Pixel 6 phones, the Pixel Slate tablet, and the Pixelbook and Pixelbook Go laptops) as well as many third-party smartphone, tablet, or computer devices. <i>See, e.g.</i> , https://store.google.com/us/magazine/compare_pixel ;
	https://store.google.com/us/product/google_pixelbook_specs; https://store.google.com/us/product/pixel_slate_specs. For purposes of this chart, any smartphone, tablet, or computer device installed with the Google Home app, either alone or together with one or more of these other Cast-enabled apps, will be referred to as a "Cast-enabled computing device."

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¹ Additional information regarding the accused instrumentalities is set forth in the Infringement Contention Chart for U.S. Patent No. 10,848,885 (Ex. D), which is incorporated herein by reference.

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Claim 1	Accused Instrumentalities
	As set out in the Supplemental Infringement Contentions, Sonos has endeavored to list the possible third-party smartphone, tablet, and computer devices that may have been used to download and install the Google Home app between November 2019 to present. <i>See</i> Appx. 1. Each of these third-party smartphone, tablet, and computer devices, when installed with the Google Home app, meets all elements of the claims as explained in more detail herein. As set forth below, Sonos cites representative examples of Google smartphone, tablet, and computer devices meeting elements 1.1, 1.2, and 1.3, but notes that the hardware aspects recited in elements 1.1, 1.2, and 1.3 have become ubiquitous among all smartphone, tablet, and computer devices. Each possible third-party smartphone, tablet, and computer device listed in Appendix 1 contains these aspects and thus meets elements 1.1, 1.2, and 1.3.
	Certain of the aforementioned Cast-enabled media players also include a display screen and software that enables these Cast-enabled media players to additionally function as a control device for other Cast-enabled media players. This sub-category of Cast-enabled media players, which will be referred to herein as "Cast-enabled displays," includes Google's Home Hub, Nest Hub, and Nest Hub Max media players. <i>See, e.g.</i> , https://store.google.com/us/product/google_nest_hub_max?hl=en-US#overview-modal-music; https://support.google.com/googlenest/answer/9165738?hl=en-GB&ref_topic=7030084 . Similar to the Cast-enabled apps installed on the Cast-enabled computing devices, the software installed on these Cast-enabled displays allows a user to "cast" to a previously-created "speaker group" using the Cast-enabled display's user interface.
	As described in further detail below, each Cast-enabled computing device comprises a "computing device" as recited in claim 1. Further, because each Cast-enabled media player is a data network device (<i>i.e.</i> , a device that is configured to connect to and communicate over a medium that interconnects devices in a manner that enables them to send digital data packets to and receive digital data packets from each other) and is configured to process and output audio, each Cast-enabled media player comprises a "zone player" as recited in claim 1. <i>See, e.g.</i> , Pl.'s Opening Markman Br. (D.I. 60 of 20-cv-881-ADA) at pp. 4-6, 23-26, Exs. 24-25; Pl.'s Reply Markman Br. (D.I. 66 of 20-cv-881-ADA) at pp. 2-3, 10-12, Exs. 26-27; SONOS-SVG2-00018184 - SONOS-SVG2-00018236 [ITC Order No. 20] at p. 15; https://support.google.com/chromecast/answer/3046409?hl=en; ; https://store.google.com/us/product/nest_wifi_specs?hl=en-US.

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Claim 1	Accused Instrumentalities
[1.1] one or more	Each Cast-enabled computing device comprises one or more processors. See, e.g.,
processors;	https://store.google.com/us/magazine/compare_pixel;
	https://store.google.com/us/product/google_pixelbook_specs;
	https://store.google.com/us/product/pixel_slate_specs.
[1.2] a non-	Each Cast-enabled computing device comprises a non-transitory computer-readable medium. See, e.g.,
transitory	https://store.google.com/us/magazine/compare_pixel;
computer-readable	https://store.google.com/us/product/google_pixelbook_specs;
medium;	https://store.google.com/us/product/pixel_slate_specs.
[1.3] and program	Each Cast-enabled computing device comprises program instructions stored on the non-transitory computer-
instructions stored	readable medium that, when executed by the Cast-enabled computing device's one or more processors, cause
on the non-	the Cast-enabled computing device to perform the functions identified below. See, e.g.,
transitory	https://store.google.com/us/magazine/compare_pixel;
computer-readable	https://store.google.com/us/product/google_pixelbook_specs;
medium that, when	https://store.google.com/us/product/pixel_slate_specs.
executed by the one	
or more processors,	
cause the	
computing device	
to perform	
functions	
comprising:	
[1.4] while serving	Each Cast-enabled computing device comprises program instructions stored on the Cast-enabled computing
as a controller for a	device's non-transitory computer-readable medium that, when executed by the Cast-enabled computing
networked media	device's one or more processors, cause the Cast-enabled computing device to, while serving as a controller for
playback system	a Cast-enabled playback system comprising a first Cast-enabled media player and at least two other Cast-
comprising a first	enabled media players, where the first Cast-enabled media player is operating in a standalone mode in which
zone player and at least two other zone	the first Cast-enabled media player is configured to play back media individually, perform the functions identified below.
players, wherein the	Identified Delow.
first zone player is	For instance, each Cast-enabled computing device is programmed with the capability to serve as a controller for
operating in a	a Cast-enabled playback system that includes a first Cast-enabled media player and at least two other Cast-
standalone mode in	enabled media players, where at least the first Cast-enabled media player is operating in a standalone mode in
standarone mode m	chabled media players, where at least the first Cast-chabled media player is operating in a standardie mode in

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Claim 1	Accused Instrumentalities
which the first zone	which the first Cast-enabled media player is configured to play back audio individually rather than a group
player is configured	mode in which the first Cast-enabled media player is configured to play back audio as part of a group of Cast-
to play back media	enabled media players. See, e.g.,
individually:	https://support.google.com/googlenest/answer/7174267?co=GENIE.Platform%3DAndroid&hl=en;
	https://support.google.com/chromecast/answer/6178107?co=GENIE.Platform%3Dandroid&hl=en;
	https://support.google.com/googlenest/answer/7030379?co=GENIE.Platform%3Dandroid&hl=en-GB;
	https://support.google.com/googlenest/answer/7181830?hl=en-GB&ref_topic=7030084;
	https://support.google.com/chromecast/answer/3228332?hl=en-
	GB&ref topic=4602553&co=GENIE.Platform%3Ddesktop&oco=1.
[1.5] receiving a	Each Cast-enabled computing device comprises program instructions stored on the Cast-enabled computing
first request to	device's non-transitory computer-readable medium that, when executed by the Cast-enabled computing
create a first zone	device's one or more processors, cause the Cast-enabled computing device to receive a first request to create a
scene comprising a	first zone scene comprising a first predefined grouping of Cast-enabled media players including at least the first
first predefined	Cast-enabled media player and a second Cast-enabled media player that are to be configured for synchronous
grouping of zone	playback of media when the first zone scene is invoked.
players including at	
least the first zone	For instance, each Cast-enabled computing device is programmed such that, while serving as a controller for a
player and a second	Cast-enabled playback system that includes a first Cast-enabled media player and at least two other Cast-
zone player that are	enabled media players, the Cast-enabled computing device is operable to receive a request from a user to create
to be configured for	a first "speaker group" that includes the first Cast-enabled media player and a second Cast-enabled media
synchronous	player in the Cast-enabled playback system that are to be configured for synchronous playback of audio when
playback of media	the first "speaker group" is invoked. See, e.g.,
when the first zone	https://support.google.com/googlenest/answer/7174267?co=GENIE.Platform%3DAndroid&hl=en (providing
scene is invoked;	instructions on how to create "speaker groups" for "synchronous music throughout the home"). Thus, this first
	"speaker group" that a user seeks to create with this first request amounts to the claimed "first zone scene
	comprising a first predefined grouping of zone players including at least the first zone player and a second zone
	player that are to be configured for synchronous playback of media when the first zone scene is invoked"
	because it is a previously-saved group of Cast-enabled players that has been predefined to include the first Cast-
	enabled media player and a second Cast-enabled media player and that is capable of existing in two states – an
	uninvoked state in which each Cast-enabled player in the previously-saved group is configured for individual
	playback of audio and an invoked state in which the Cast-enabled players in the previously-saved group are
	configured for synchronous playback of audio. <i>Id</i> .

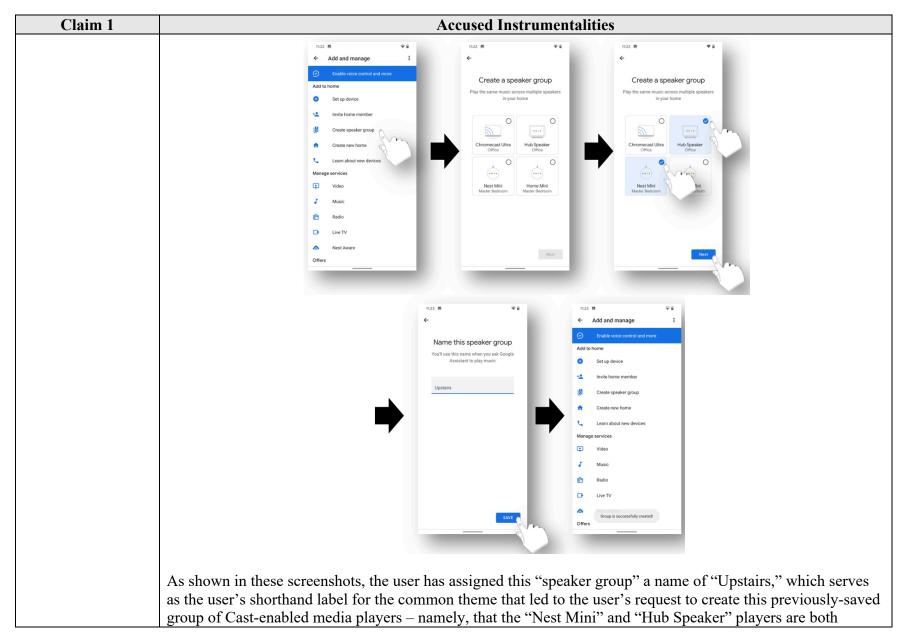
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Claim 1	Accused Instrumentalities
Claim I	Moreover, even if the Court were to construe the term "zone scene" to mean "a previously-saved group of zone players <i>according to a common theme</i> ," as Judge Alan Albright suggested during the Markman hearing in 20-cv-881-ADA (<i>see</i> D.I. 106 at 38:1-3), this first "speaker group" that a user seeks to create with this first request amounts to a first "zone scene" under that construction. Indeed, every "speaker group" that a user seeks to create in a Cast-enabled playback system is a previously-saved, predefined group of Cast-enabled players that
	is capable of existing in two states – an uninvoked state in which each Cast-enabled player in the previously-saved group is configured for individual playback of audio and an invoked state in which the Cast-enabled players in the previously-saved group are configured for synchronous playback of audio. <i>See, e.g.</i> , https://support.google.com/googlenest/answer/7174267?co=GENIE.Platform%3DAndroid&hl=en (providing instructions on how to create "speaker groups" for "synchronous music throughout the home"). Further, every
	"speaker group" that a user seeks to create in a Cast-enabled playback system has some common theme, which in this context amounts to whatever common topic, subject, etc. led the user to decide that these particular Cast-enabled media players should be placed into a previously-saved group that allows for synchronous playback when invoked. <i>Id</i> ; see also, e.g., '966 Patent at 2:38-45 ("According to one aspect of the present invention, a mechanism is provided to allow a user to group some of the players according to a theme or scene, where each
	of the players is located in a zone. When the scene is activated, the players in the scene react in a synchronized manner. For example, the players in the scene are all caused to play an audio source or music in a playlist, wherein the audio source may be located anywhere on a network."), 3:52-56 ("FIG. 3A provides an illustration of one zone scene, where the left column shows the starting zone grouping-all zones are separate, the column on the right shows the effects of grouping the zones to make a group of 3 zones named after 'Morning'"); 8:57-
	61 (same); 10:37-42 ("The process 600 then moves to 604 where it allows a user to decide which zone players to be associated with the scene. For example, there are ten players in a household, and the scene is named after 'Morning'. The user may be given an interface to select four of the ten players to be associated with the scene."), FIG. 5A; D.I. 106 [Markman Hr. Tr.] at 30:24-31:5 (Google's counsel arguing "the theme would be,
	for example, grouping three areas as a morning scene or a morning theme because you get up in the morning and these are the three areas you want to have music in. You could do the same thing and the patent provides examples for other types of zone scenes for different times of day or different types of events"); American Heritage Dictionary of the English Language, Fifth Edition (2011), available at
	https://www.thefreedictionary.com/theme (defining "theme" as "[a] topic of discourse or discussion."); Collins English Dictionary – Complete and Unabridged, 12th Edition (2014), available at, https://www.thefreedictionary.com/theme (defining "theme" as "an idea or topic expanded in a discourse,

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Claim 1	Accused Instrumentalities
	discussion, etc"); https://www.learnersdictionary.com/definition/theme (defining "theme" as "the particular
	subject or idea on which the style of something (such as a party or room) is based");
	https://dictionary.cambridge.org/us/dictionary/english/theme (defining "theme" as "the main subject of a talk,
	book, movie, etc."). Typically, this common theme will be a specific area (or set of areas) within the user's
	listening environment in which the user desires to listen to audio in synchrony across multiple Cast-enabled media players, although Google's "Cast" technology provides a user with the flexibility to create a previously-saved group of Cast-enabled media players according to any common topic or subject that is of interest to the user. As part of the user workflow for creating a "speaker group," a Cast-enabled computing device also prompts the user to input a name for the "speaker group," which serves as the user's shorthand label of the common theme that led to the user's request to create the previously-saved group of Cast-enabled media players and thereby allows the user to locate and select that previously-saved group later when the user wishes to invoke it for synchronous playback. <i>See, e.g.</i> , https://support.google.com/googlenest/answer/7174267?co=GENIE.Platform%3DAndroid&hl=en.
	One example of this functionality is illustrated by the following screenshots from an example Cast-enabled computing device that is installed with the Google Home app, which show the Cast-enabled computing receiving a request from a user to create a first "speaker group" that includes the "Nest Mini" as the first zone player and "Hub Speaker" as the second zone player:

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Claim 1	Accused Instrumentalities
	located in an area (or set of areas) within the user's listening environment that the user considers to be the upstairs of the listening environment and the user has a desire to listen to audio in synchrony across those specific Cast-enabled media players at some point in the future.
	Representative excerpts of Google's source code related ² to the aforementioned functionality include:

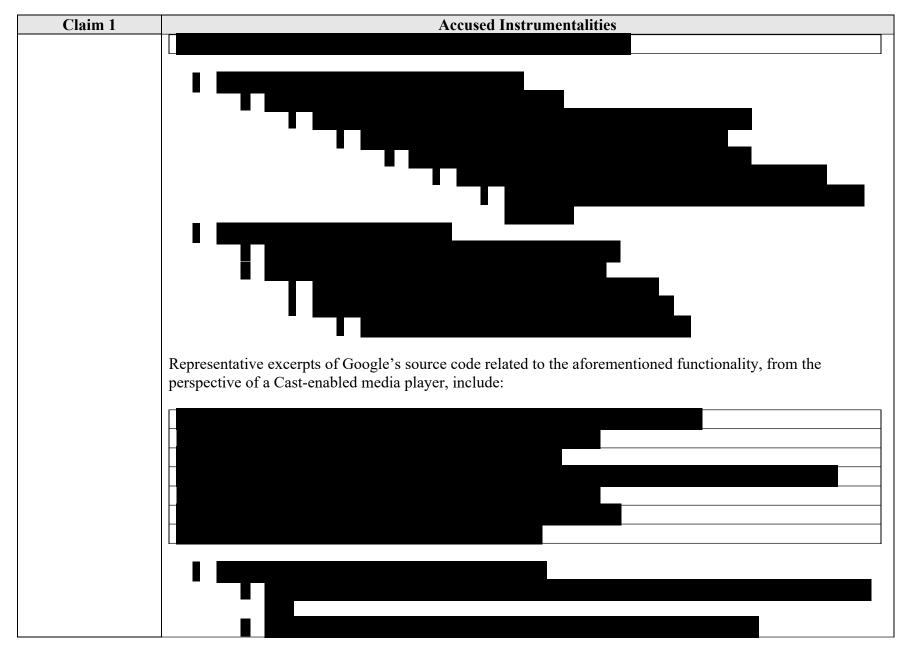
2

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Claim 1	Accused Instrumentalities
	Sonos further incorporates by reference Google's response to Sonos's Fact Discovery Interrogatory No. 13, including any of Google's documents or source code cited therein. <i>See</i> Defendant's Objections & Responses to Plaintiff's First Set of Fact Discovery Interrogatories to Defendants.
[1.6] based on the first request, i) causing creation of the first zone scene, ii) causing an indication of the	Each Cast-enabled computing device comprises program instructions stored on the Cast-enabled computing device's non-transitory computer-readable medium that, when executed by the Cast-enabled computing device's one or more processors, cause the Cast-enabled computing device to, based on the first request, (i) cause creation of the first zone scene, (ii) cause an indication of the first zone scene to be transmitted to the first Cast-enabled media player, and (iii) cause storage of the first zone scene.
first zone scene to be transmitted to the first zone player, and iii) causing storage of the first zone scene;	For instance, each Cast-enabled computing device is programmed such that, while serving as a controller for a Cast-enabled playback system that includes a first Cast-enabled media player and at least two other Cast-enabled media players, the Cast-enabled computing device is operable to receive a request from a user to create a first "speaker group" including the first Cast-enabled media player and a second Cast-enabled media player in the Cast-enabled playback system, and then based on the request, the Cast-enabled computing device generates data that defines the first "speaker group" and transmits a "join_group" message containing that data to each of the first and second Cast-enabled media players, which causes each of the first and second Cast-enabled media players to store data defining the first "speaker group" (e.g Thus, based on the request, the Cast-enabled computing device (i) causes creation of the first "speaker group," (ii) causes an indication of the first "speaker group" to be transmitted to the first Cast-enabled media player, and (iii) causes storage of the first "speaker group." <i>See e.g.</i> , https://support.google.com/googlenest/answer/7174267?co=GENIE.Platform%3DAndroid&hl=en (providing instructions on how to create "speaker groups"); GOOG-SONOSWDTX-00048962
	at 62:

Claim 1	Accused Instrumentalities
Claim 1	GOOG-SONOSWDTX-00044046 "join_group" message). This first "speaker group" amounts to the claimed first "zone scene" for the reasons explained above in
	connection with limitation 1.5. Representative excerpts of Google's source code ³ related to the aforementioned functionality, from the perspective of a Cast-enabled computing device, include the source code cited above in connection with claim limitation 1.5 as well as:

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Claim 1	Accused Instrumentalities
	Sonos further incorporates by reference Google's response to Sonos's Fact Discovery Interrogatory No. 13, including any of Google's documents or source code cited therein. <i>See</i> Defendant's Objections & Responses to Plaintiff's First Set of Fact Discovery Interrogatories to Defendants.
[1.7] receiving a second request to create a second zone scene comprising a second predefined grouping of zone	Each Cast-enabled computing device comprises program instructions stored on the Cast-enabled computing device's non-transitory computer-readable medium that, when executed by the Cast-enabled computing device's one or more processors, cause the Cast-enabled computing device to receive a second request to create a second zone scene comprising a second predefined grouping of Cast-enabled media players including at least the first Cast-enabled media player and a third Cast-enabled media player that are to be configured for synchronous playback of media when the second zone scene is invoked, where the third Cast-enabled media player is different than the second Cast-enabled media player.
players including at least the first zone player and a third zone player that are to be configured for synchronous playback of media when the second	For instance, each Cast-enabled computing device is programmed such that, while serving as a controller for a Cast-enabled playback system that includes a first Cast-enabled media player and at least two other Cast-enabled media players, the Cast-enabled computing device is configured to receive a request from a user to create a second "speaker group" that includes the first Cast-enabled media player and a third Cast-enabled media player in the Cast-enabled playback system that are to be configured for synchronous playback of audio when the second "speaker group" is invoked. <i>See</i> , <i>e.g.</i> , https://support.google.com/googlenest/answer/7174267?co=GENIE.Platform%3DAndroid&hl=en (providing
zone scene is invoked, wherein the third zone	instructions on how to create "speaker groups" for "synchronous music throughout the home"); claim limitation 1.5. Thus, this second "speaker group" that a user seeks to create with this second request amounts to the claimed "second zone scene comprising a second predefined grouping of zone players including at least the
player is different than the second zone player;	first zone player and a third zone player that are to be configured for synchronous playback of media when the second zone scene is invoked" because it is a previously-saved group of Cast-enabled players that has been predefined to include the first Cast-enabled media player and a third Cast-enabled media player and that is

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Claim 1	Accused Instrumentalities
	capable of existing in two states – an uninvoked state in which each Cast-enabled player in the previously-saved group is configured for individual playback of audio and an invoked state in which the Cast-enabled players in the previously-saved group are configured for synchronous playback of audio. <i>Id</i> .
	Moreover, even if the Court were to construe the term "zone scene" to mean "a previously-saved group of zone players <i>according to a common theme</i> ," as Judge Alan Albright suggested during the Markman hearing in 20-cv-881-ADA (<i>see</i> D.I. 106 at 38:1-3), this second "speaker group" that a user seeks to create with this second request amounts to a second "zone scene" under that construction for the same reasons explained above in connection with limitation 1.5.
	One example of this functionality is illustrated by the following screenshots from an example Cast-enabled computing device that is installed with the Google Home app, which show the Cast-enabled computing receiving a request from a user to create a second "speaker group" that includes the "Nest Mini" as the first zone player and "Home Mini" as the third zone player:
	1123
	© Enable value control and more Create a speaker group Create a speaker group
	Add to home Play the same music across multiple speakers Play the same music across multiple speakers in your home in your home
	Invite home member Create speaker groups
	Create new home Chromecast Ultra Office Circle Circ
	Learn about new devices Manage services
	Nest Mini Master Bedroom Master Bedroom Master Bedroom
	■ Music Radio
	D. UveTV
	Offers Next Next

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Claim 1	Accused Instrumentalities
Claim 1	As shown in these screenshots, the user has assigned this "speaker group" a name of "Party," which serves as the user's shorthand label for the common theme that led to the user's request to create this previously-saved group of Cast-enabled media players – namely, that the "Nest Mini" and "Home Mini" players are located in an area (or set of areas) within the user's listening environment that the user associates with having a party and the user has a desire to listen to audio in synchrony across those specific Cast-enabled media players at some point in the future. Representative excerpts of Google's source code related to the aforementioned functionality include the source code cited above in connection with claim limitation 1.5. Sonos further incorporates by reference Google's response to Sonos's Fact Discovery Interrogatory No. 13, including any of Google's documents or source code cited therein. See Defendant's Objections & Responses to Plaintiff's First Set of Fact Discovery Interrogatories to Defendants.
[1.8] based on the second request, i) causing creation of the second zone	Each Cast-enabled computing device comprises program instructions stored on the Cast-enabled computing device's non-transitory computer-readable medium that, when executed by the Cast-enabled computing device's one or more processors, cause the Cast-enabled computing device to, based on the second request, (i)

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Claim 1	Accused Instrumentalities
scene, ii) causing	cause creation of the second zone scene, (ii) cause an indication of the second zone scene to be transmitted to
an indication of the	the first Cast-enabled media player, and (iii) cause storage of the second zone scene.
second zone scene	
to be transmitted to	For instance, each Cast-enabled computing device is programmed such that, while serving as a controller for a
the first zone	Cast-enabled playback system that includes a first Cast-enabled media player and at least two other Cast-enabled media players, the Cast-enabled computing device is operable to receive a request from a user to create
player, and iii) causing storage of	a second "speaker group" including the first Cast-enabled media player and a third Cast-enabled media player
the second zone	in the Cast-enabled playback system, and then based on the request, the Cast-enabled computing device
scene;	generates data that defines the second "speaker group" and transmits a
,	"join_group" message containing that data to each of the first and third Cast-enabled media players, which
	causes each of the first and third Cast-enabled media players to store data defining the second "speaker group"
	Thus, based on the request, the Cast-enabled computing device (i) causes creation of the
	second "speaker group," (ii) causes an indication of the second "speaker group" to be transmitted to the first
	Cast-enabled media player, and (iii) causes storage of the second "speaker group." See e.g.,
	https://support.google.com/googlenest/answer/7174267?co=GENIE.Platform%3DAndroid&hl=en (providing
	instructions on how to create "speaker groups"); claim limitation 1.6.
	This second "speaker group" amounts to the claimed second "zone scene" for the reasons explained above in connection with limitation 1.7.
	Representative excerpts of Google's source code related to the aforementioned functionality include the source code cited above in connection with claim limitation 1.6.
	Sonos further incorporates by reference Google's response to Sonos's Fact Discovery Interrogatory No. 13, including any of Google's documents or source code cited therein. <i>See</i> Defendant's Objections & Responses to Plaintiff's First Set of Fact Discovery Interrogatories to Defendants.
[1.9] displaying a	Each Cast-enabled computing device comprises program instructions stored on the Cast-enabled computing
representation of	device's non-transitory computer-readable medium that, when executed by the Cast-enabled computing
the first zone scene	device's one or more processors, cause the Cast-enabled computing device to display a representation of the
and a representation	first zone scene and a representation of the second zone scene.

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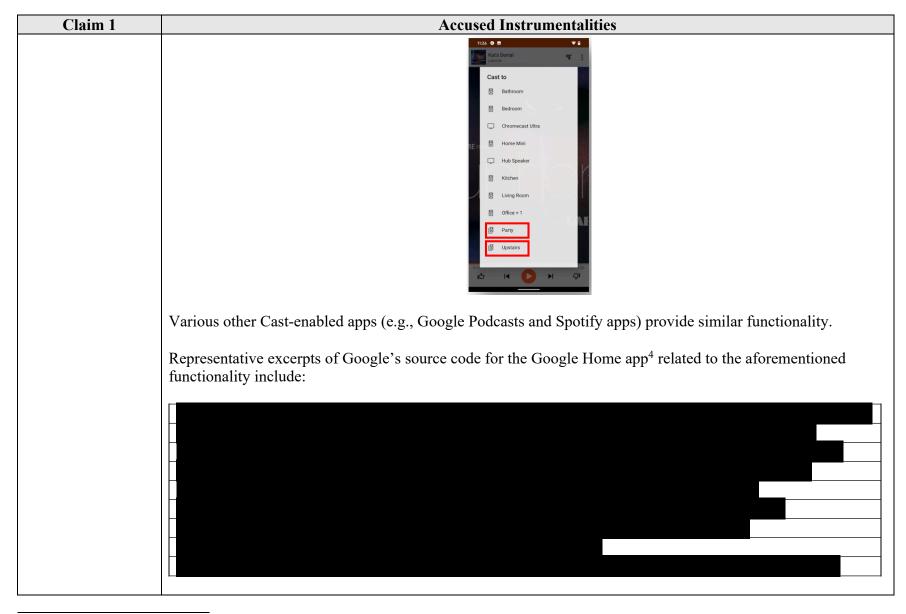
Claim 1	Accused Instrumentalities
of the second zone	For instance, each Cast-enabled computing device is programmed such that, while serving as a controller for a
scene; and	Cast-enabled playback system that includes a first Cast-enabled media player and at least two other Cast-
	enabled media players, the Cast-enabled computing device is operable to display (i) a representation of a first
	"speaker group" (which is the claimed "first zone scene") including the first Cast-enabled media player and a
	second Cast-enabled media player in the Cast-enabled playback system, and (ii) a representation of a second
	"speaker group" (which is the claimed "second zone scene") including the first Cast-enabled media player and
	a third Cast-enabled media player. See, e.g.,
	https://support.google.com/googlenest/answer/7174267?co=GENIE.Platform%3DAndroid&hl=en;
	https://support.google.com/chromecast/answer/6178107?co=GENIE.Platform%3DAndroid&hl=en;
	https://support.google.com/googlenest/answer/7030379?co=GENIE.Platform%3DAndroid&hl=en-GB;
	https://support.google.com/googlenest/answer/7181830?hl=en-GB&ref_topic=7030084;
	https://support.google.com/chromecast/answer/3228332?hl=en-
	GB&ref_topic=4602553&co=GENIE.Platform%3DDesktop&oco=1.
	One example of this functionality is illustrated by the following screenshots from an example Cast-enabled computing device that is installed with the Google Home app, which show the Cast-enabled computing device displaying a graphical user interface (GUI) of the Google Home app that comprises (i) a representation of a first "speaker group" named "Upstairs" that includes the "Nest Mini" and "Hub Speaker" players (which is the claimed "first zone scene" that includes the "first zone player" and "second zone player"), and (ii) a representation of a second "speaker group" named "Party" that includes the "Nest Mini" and "Home Mini" players (which is the claimed "second zone scene" that includes the "first zone player" and "third zone player"):

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Claim 1	Accused Instrumentalities
	Another example of this functionality is illustrated by the following screenshots from an example Cast-enabled computing device that is installed with not only the Google Home app, but also Google's YouTube Music app, which show the Cast-enabled computing device displaying a GUI of the YouTube Music app that comprises (i) a representation of a first "speaker group" named "Upstairs" (which is the claimed "first zone scene"), and (ii) a representation of a second "speaker group" named "Party" (which is claimed "second zone scene"):

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Claim 1	Accused Instrumentalities
	Cast to Cronnecast Utra Home Mari Hob Speaker Net May Pury Puptairs CHACK CAST TO CRONNECAST UTRA CRONNECAST
	Yet another example of this functionality is illustrated by the following screenshots from an example Castenabled computing device that is installed with not only the Google Home app, but also Google's Google Play Music app, which show the Cast-enabled computing device displaying a GUI of the Google Play Music app that comprises (i) a representation of a first "speaker group" named "Upstairs" (which is the claimed "first zone scene"), and (ii) a representation of a second "speaker group" named "Party" (which is claimed "second zone scene"):



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Claim 1	Accused Instrumentalities
	Sonos further incorporates by reference Google's response to Sonos's Fact Discovery Interrogatory No. 13,
	including any of Google's documents or source code cited therein. <i>See</i> Defendant's Objections & Responses to Plaintiff's First Set of Fact Discovery Interrogatories to Defendants.
[1.10] while displaying the representation of	Each Cast-enabled computing device comprises program instructions stored on the Cast-enabled computing device's non-transitory computer-readable medium that, when executed by the Cast-enabled computing device's one or more processors, cause the Cast-enabled computing device to, while displaying the

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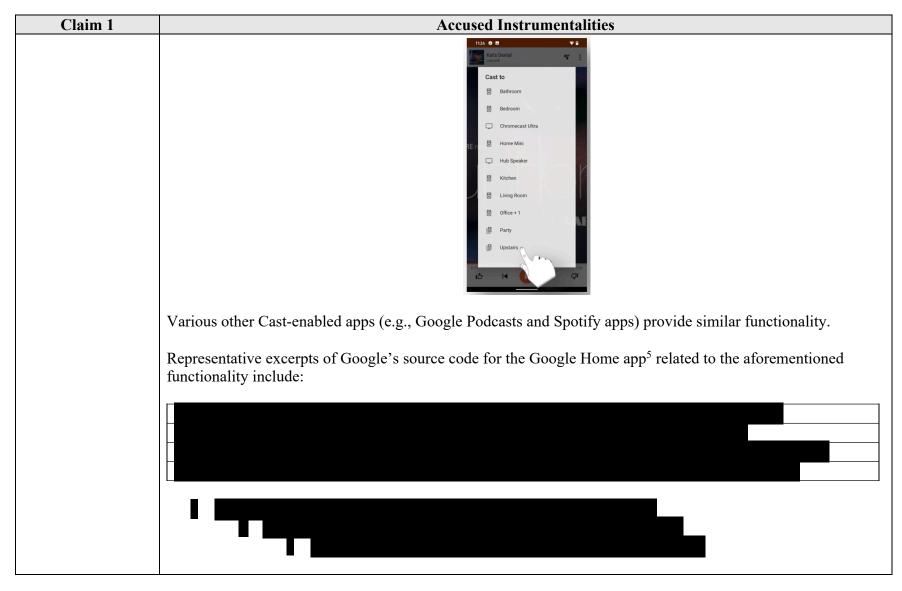
Claim 1	Accused Instrumentalities
the first zone scene	representation of the first zone scene and the representation of the second zone scene, receive a third request to
and the	invoke the first zone scene.
representation of	
the second zone	For instance, each Cast-enabled computing device is programmed such that, while displaying (i) a
scene, receiving a	representation of a first "speaker group" including the first Cast-enabled media player and a second Cast-
third request to	enabled media player (which is the claimed "first zone scene"), and (ii) a representation of a second "speaker
invoke the first	group" including the first Cast-enabled media player and a third Cast-enabled media player (which is the
zone scene; and	claimed "second zone scene"), the Cast-enabled computing device is operable to receive a request from a user
	to launch the first "speaker group" for synchronous playback, which amounts to the claimed "third request to
	invoke the first zone scene." See, e.g.,
	https://support.google.com/googlenest/answer/7174267?co=GENIE.Platform%3DAndroid&hl=en; https://support.google.com/chromecast/answer/6178107?co=GENIE.Platform%3DAndroid&hl=en;
	https://support.google.com/googlenest/answer/7030379?co=GENIE.Platform%3DAndroid&hl=en-GB;
	https://support.google.com/googlenest/answer/7181830?hl=en-GB&ref_topic=7030084;
	https://support.google.com/chromecast/answer/3228332?hl=en-
	GB&ref topic=4602553&co=GENIE.Platform%3DDesktop&oco=1.
	GBetter_topic 1002333eeco GBNIE.1 Intronii/03DDesktopecoco 1.
	One example of this functionality is illustrated by the following screenshots from an example Cast-enabled
	computing device that is installed with the Google Home app, which show the Cast-enabled computing
	receiving a request from a user to launch (and thus "invoke") the "speaker pair" named "Upstairs" (which is the
	claimed "first zone scene") via the GUI of the Google Home app:

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Claim 1	Accused Instrumentalities
	Another example of this functionality is illustrated by the following screenshots from an example Cast-enabled computing device that is installed with not only the Google Home app, but also Google's YouTube Music app, which show the Cast-enabled computing device receiving a request from a user to launch (and thus "invoke") the "speaker pair" named "Upstairs" (which is the claimed "first zone scene") via the GUI of the YouTube Music app:

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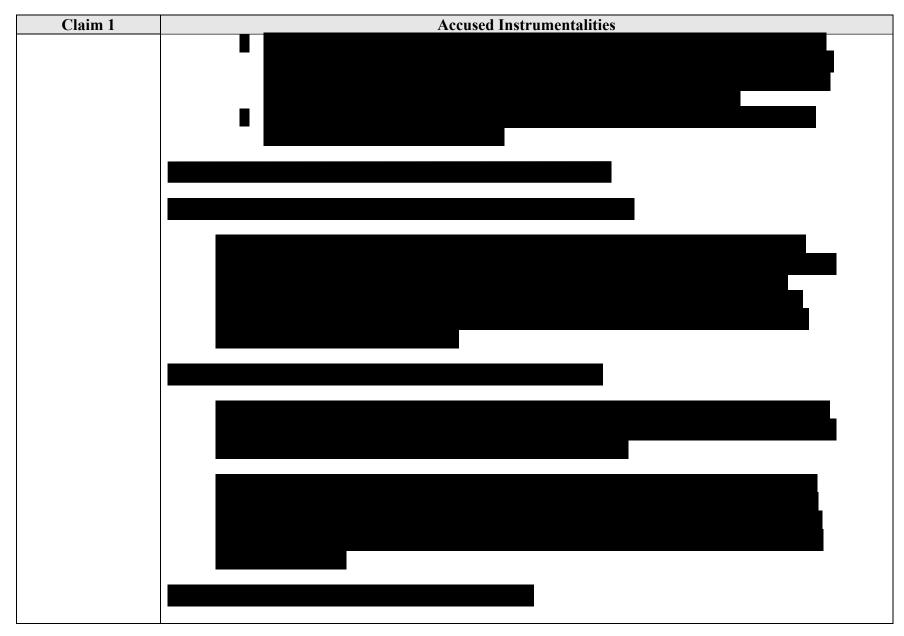
Claim 1	Accused Instrumentalities
	Yet another example of this functionality is illustrated by the following screenshots from an example Castenabled computing device that is installed with not only the Google Home app, but also Google's Google Play
	Music app, which show the Cast-enabled computing device receiving a request from a user to launch (and thus "invoke") the "speaker pair" named "Upstairs" (which is the claimed "first zone scene") via the GUI of the Google Play Music app:



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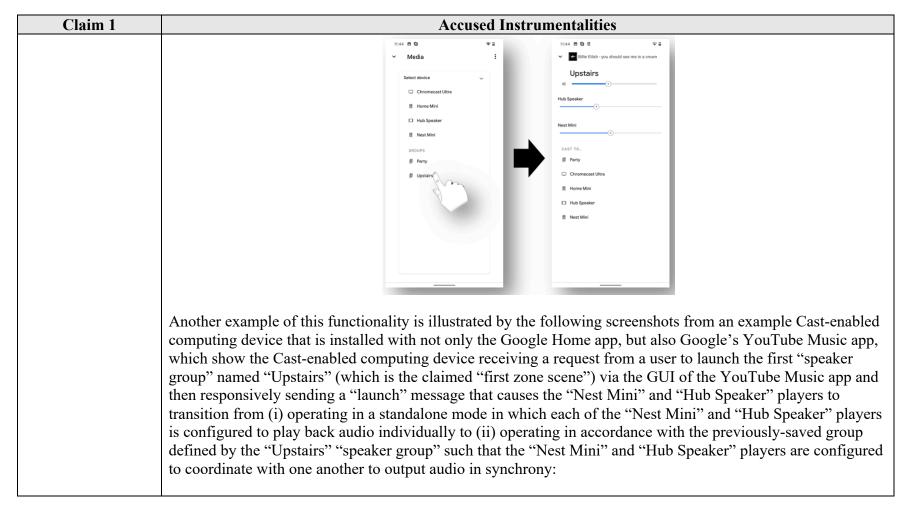
Claim 1	Accused Instrumentalities
	Sonos further incorporates by reference Google's response to Sonos's Fact Discovery Interrogatory No. 13,
	including any of Google's documents or source code cited therein. See Defendant's Objections & Responses to
	Plaintiff's First Set of Fact Discovery Interrogatories to Defendants.
[1.11] based on the	Each Cast-enabled computing device comprises program instructions stored on the Cast-enabled computing
third request, causing the first	device's non-transitory computer-readable medium that, when executed by the Cast-enabled computing
zone player to	device's one or more processors, cause the Cast-enabled computing device to, based on the third request, cause the first Cast-enabled media player to transition from operating in the standalone mode to operating in
transition from	accordance with the first predefined grouping of Cast-enabled media players such that the first Cast-enabled
operating in the	media player is configured to coordinate with at least the second Cast-enabled media player to output media in
standalone mode to	synchrony with output of media by at least the second Cast-enabled media player.
operating in	
accordance with the	For instance, each Cast-enabled computing device is programmed such that, based on a request to launch a first
first predefined	"speaker group" (which is the claimed "third request to invoke the first zone scene"), the Cast-enabled
grouping of zone	computing device sends a "launch" message to the elected leader of the first "speaker group" (which could
players such that	either be the first Cast-enabled media player or the second Cast-enabled media player) that causes at least the
the first zone player	first Cast-enabled media player to transition from (i) operating in a standalone mode in which the first Cast-
is configured to coordinate with at	enabled media player is configured to play back audio individually to (ii) operating in accordance with the
least the second	previously-saved group defined by the first "speaker group" such that the first Cast-enabled media player is configured to coordinate with at least the second Cast-enabled media player to output audio in synchrony with
zone player to	the output of audio by the second Cast-enabled media player. See, e.g.,
output media in	https://support.google.com/googlenest/answer/7174267?co=GENIE.Platform%3DAndroid&hl=en ("Group any
synchrony with	combination of Google Nest or Google Home speakers and displays and Chromecast devices together for
output of media by	synchronous music throughout the home."); GOOG-SONOSWDTX-00048962
at least the second	
zone player.	



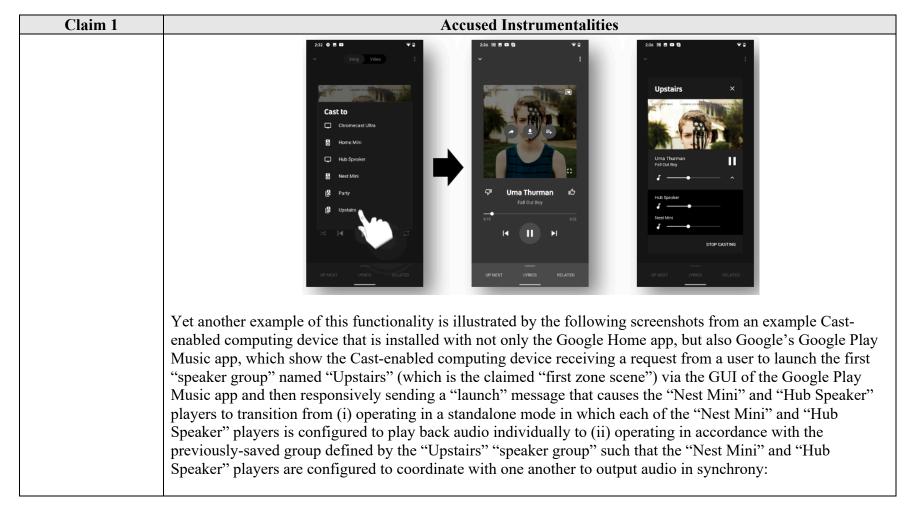
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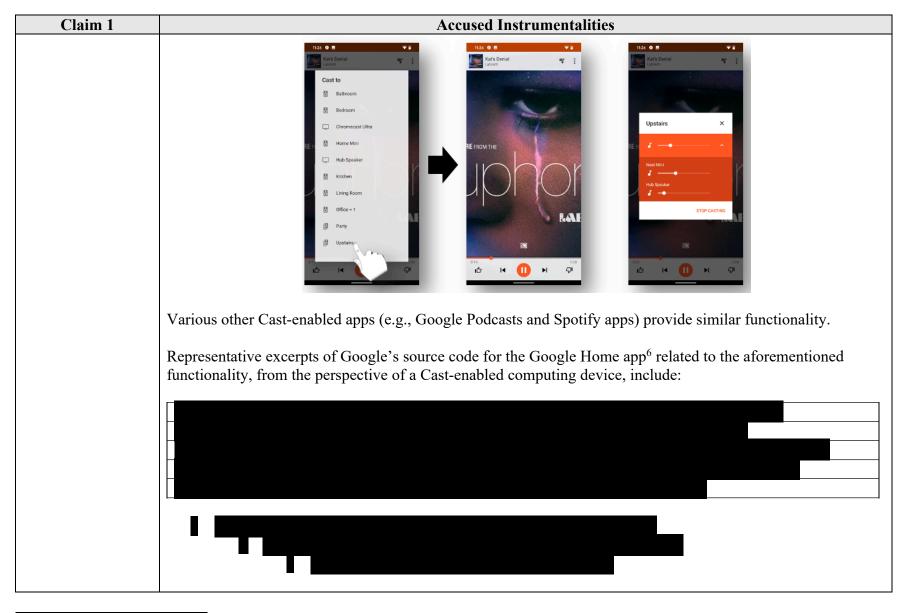
Claim 1	Accused Instrumentalities
	Two examples of this functionality are illustrated by the following screenshots from an example Cast-enabled computing device that is installed with the Google Home app, which show the Cast-enabled computing device receiving a request from a user to launch the first "speaker group" named "Upstairs" (which is the claimed "first zone scene") via the GUI of the Google Home app and then responsively sending a "launch" message that causes the "Nest Mini" and "Hub Speaker" players to transition from (i) operating in a standalone mode in which each of the "Nest Mini" and "Hub Speaker" players is configured to play back audio individually to (ii) operating in accordance with the previously-saved group defined by the "Upstairs" "speaker group" such that the "Nest Mini" and "Hub Speaker" players are configured to coordinate with one another to output audio in synchrony:
	2:10 © B © © C C C C C C C C C C C C C C C C

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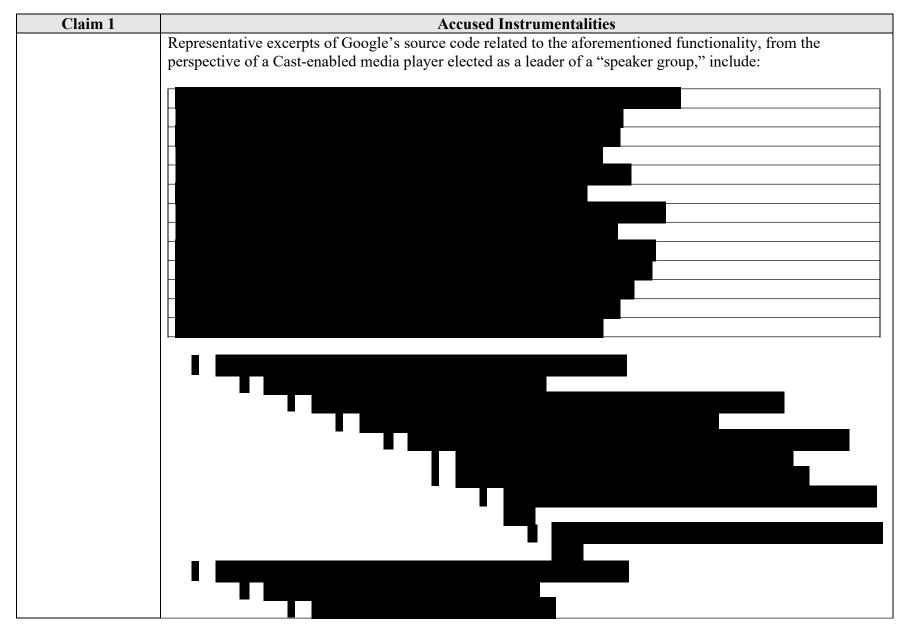


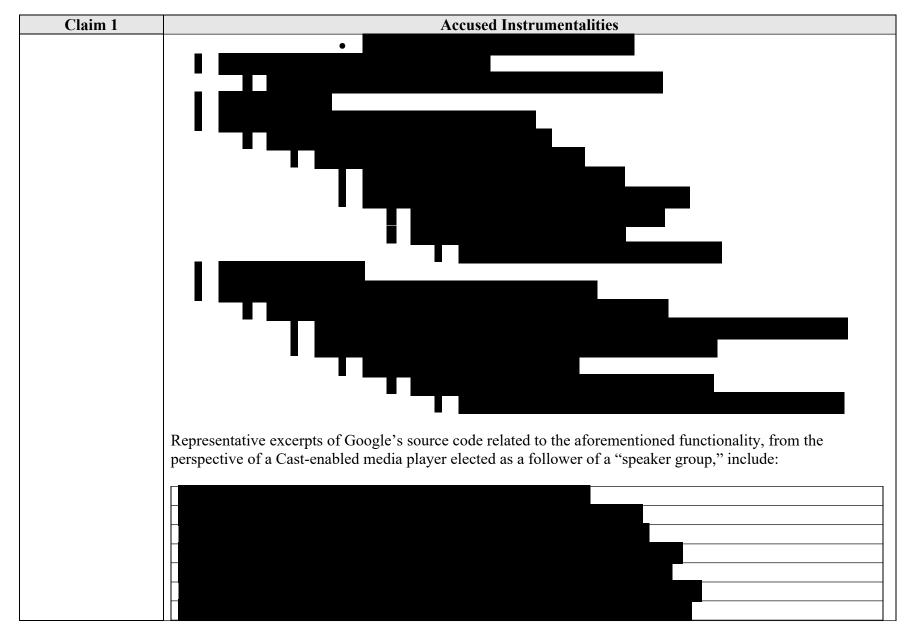
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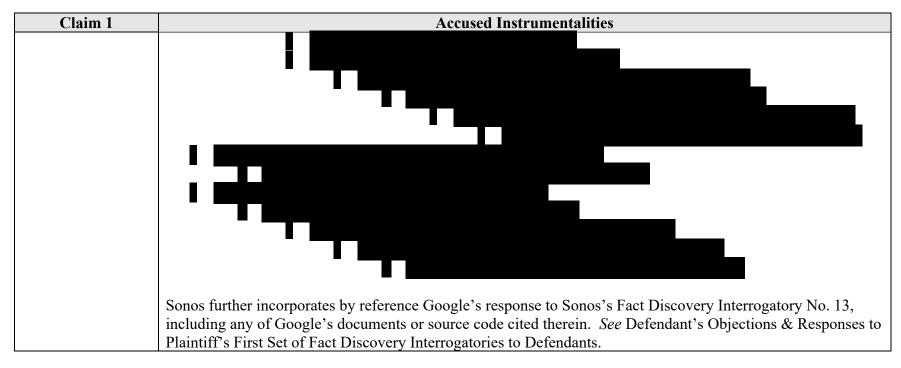




Ex. C –Infringement Contention Chart: U.S. Patent No. 10,469,966 HIGHLY CONFIDENTIAL - SOURCE CODE - ATTORNEYS' EYES ONLY



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Claim 2	Accused Instrumentalities
[2.0] The	As described above, each Cast-enabled computing device comprises a "computing device," as recited in claim
computing device	1. Moreover, each Cast-enabled computing device comprises a non-transitory computer-readable medium
of claim 1, further	including executable instructions that, when executed by the Cast-enabled computing device's one or more
comprising	processors, cause the Cast-enabled computing device to perform the functions identified below.
program	
instructions stored	
on the non-	
transitory	
computer-readable	
medium that, when	
executed by the one	
or more processors,	
cause the	

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Claim 2	Accused Instrumentalities
computing device	
to perform	
functions	
comprising:	
[2.1] while the first zone player is configured to coordinate with at least the second zone player to play back media in synchrony with at least the second zone player, receiving a fourth request to invoke the second zone scene; and Example 1.2.1 while the first zone player is coordinate with at least the second zone player in the second zone scene; and in the least the least the second zone scene; and in the least the second zone scene; and in the least the least the least the le	Each Cast-enabled computing device comprises program instructions stored on the Cast-enabled computing device's non-transitory computer-readable medium that, when executed by the Cast-enabled computing device's one or more processors, cause the Cast-enabled computing device to, while the first Cast-enabled media player is configured to coordinate with at least the second Cast-enabled media player to play back media in synchrony with at least the second Cast-enabled media player, receiving a fourth request to invoke the second zone scene. For instance, each Cast-enabled computing device is programmed such that, while the first Cast-enabled media player is operating in accordance with the previously-saved group defined by the first "speaker group" such that the first Cast-enabled media player is configured to coordinate with the second Cast-enabled media player to output audio in synchrony with the output of audio by the second Cast-enabled media player, the Cast-enabled computing device is operable to receive a request to launch the second "speaker group," which amounts to the claimed "fourth request to invoke the second zone scene." See, e.g., https://support.google.com/googlenest/answer/7174267?co=GENIE.Platform%3DAndroid&hl=en; https://support.google.com/googlenest/answer/6178107?co=GENIE.Platform%3DAndroid&hl=en; https://support.google.com/googlenest/answer/7181830?hl=en-GB&ref_topic=7030084; https://support.google.com/googlenest/answer/3228332?hl=en-GB&ref_topic=4602553&co=GENIE.Platform%3DDesktop&oco=1. One example of this functionality is illustrated by the following screenshots from an example Cast-enabled computing device installed with the Google Home app, which show the Cast-enabled computing receiving a request from a user to launch (and thus "invoke") the second "speaker group" named "Party" (which is the claimed "second zone scene") via the GUI of the Google Home app while the "Nest Mini" (the claimed "first zone player") is configured to output audio in synchrony with the "Hub Speaker" (the clai

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Claim 2	Accused Instrumentalities
Claim 2	Another example of this functionality is illustrated by the following screenshots from an example Cast-enabled computing device installed with not only the Google Home app, but also Google's YouTube Music app, which show the Cast-enabled computing receiving a request from a user to launch (and thus "invoke") the second "speaker group" named "Party" (which is the claimed "second zone scene") via the GUI of the YouTube Music app while the "Nest Mini" (the claimed "first zone player") is configured to output audio in synchrony with the "Hub Speaker" (the claimed "second zone player") in accordance with the launched first "speaker group" named "Upstairs":

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Claim 2	Accused Instrumentalities
	Cast to Chromocast Utra B Downstairs B Horne Mini Hub Speaker B Next Mel B Next Mel Cast Min Blue Party Diptairs Cast Min Speak Cast Min S
	Yet another example of this functionality is illustrated by the following screenshots from an example Castenabled computing device installed with not only the Google Home app, but also Google's Google Podcasts app, which show the Cast-enabled computing receiving a request from a user to launch (and thus "invoke") the second "speaker group" named "Party" (which is the claimed "second zone scene") via the GUI of the Google Podcasts app while the "Nest Mini" (the claimed "first zone player") is configured to output audio in synchrony with the "Hub Speaker" (the claimed "second zone player") in accordance with the launched first "speaker group" named "Upstairs":

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Claim 2	Accused Instrumentalities
	Cast to Chromocast Ura Downstairs Hone Mini Hone Mini Not Speaker Nest Meis
	Various other Cast-enabled apps (e.g., Google Play Music and Spotify apps) provide similar functionality. Representative excerpts of Google's source code related to the aforementioned functionality include the source code cited above in connection with claim limitation 1.10. Sonos further incorporates by reference Google's response to Sonos's Fact Discovery Interrogatory No. 13, including apply of Google's decorporate and solved them in Son Defendent's Objections & Page 2012 and 12 and
	including any of Google's documents or source code cited therein. <i>See</i> Defendant's Objections & Responses to Plaintiff's First Set of Fact Discovery Interrogatories to Defendants.
[2.2] based on the fourth request, causing the first zone player to (a) cease to operate in accordance with the first predefined	Each Cast-enabled computing device comprises program instructions stored on the Cast-enabled computing device's non-transitory computer-readable medium that, when executed by the Cast-enabled computing device's one or more processors, cause the Cast-enabled computing device to, based on the fourth request, cause the first Cast-enabled media player to (a) cease to operate in accordance with the first predefined grouping of Cast-enabled media players such that the first Cast-enabled media player is no longer configured to coordinate with at least the second Cast-enabled media player to output media in synchrony with output of media by at least the second Cast-enabled media player and (b) begin to operate in accordance with the second

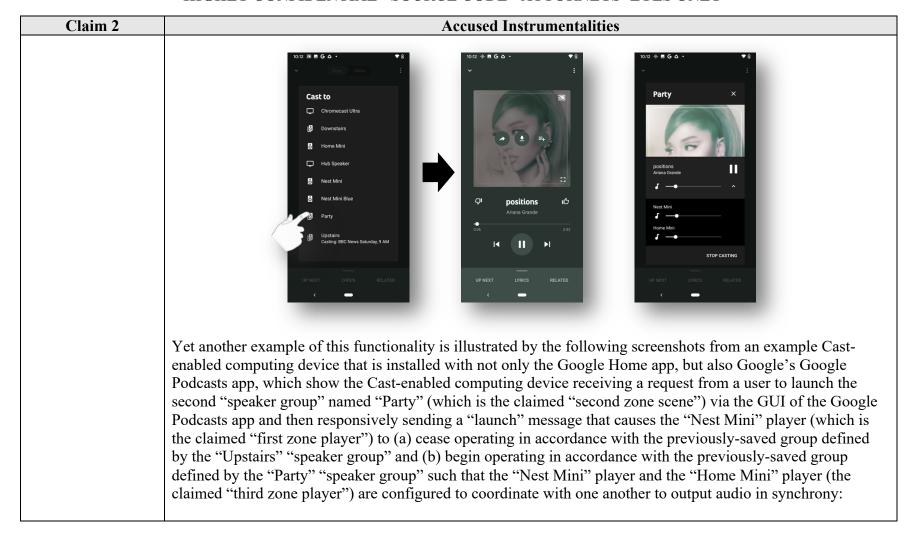
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Claim 2	Accused Instrumentalities
grouping of zone	predefined grouping of Cast-enabled media players such that the first Cast-enabled media player is configured
players such that	to coordinate with at least the third Cast-enabled media player to output media in synchrony with output of
the first zone player	media by at least the third Cast-enabled media player.
is no longer	
configured to	For instance, each Cast-enabled computing device is programmed such that, based on a request to launch the
coordinate with at	second "speaker group" (which is the claimed "fourth request to invoke the second zone scene") while the first
least the second	Cast-enabled media player is operating in accordance with the previously-saved group defined by the first
zone player to	"speaker group" (which is the claimed "first zone scene"), the Cast-enabled computing device sends a "launch"
output media in	message to the elected leader of the second "speaker group" (which could either be the first Cast-enabled media
synchrony with	player or the third Cast-enabled media player) that causes at least the first Cast-enabled media player to (a)
output of media by	cease to operate in accordance with the previously-saved group defined by the first "speaker group" such that
at least the second	the first Cast-enabled media player is no longer configured to coordinate with at least the second Cast-enabled
zone player and (b)	media player to output audio in synchrony with output of audio by at least the second Cast-enabled media
begin to operate in	player and (b) begin to operate in accordance with the previously-saved group defined by the second "speaker
accordance with the	group" such that the first Cast-enabled media player is configured to coordinate with at least the third Cast-
second predefined	enabled media player to output audio in synchrony with output of audio by at least the third Cast-enabled media
grouping of zone	player. See, e.g.,
players such that	https://support.google.com/googlenest/answer/7174267?co=GENIE.Platform%3DAndroid&hl=en ("Group any
the first zone player	combination of Google Nest or Google Home speakers and displays and Chromecast devices together for
is configured to	synchronous music throughout the home."); see also claim limitation 1.11.
coordinate with at	
least the third zone	One example of this functionality is illustrated by the following screenshots from an example Cast-enabled
player to output	computing device that is installed with the Google Home app, which show the Cast-enabled computing device
media in synchrony	receiving a request from a user to launch the second "speaker group" named "Party" (which is the claimed
with output of	"second zone scene") via the GUI of the Google Home app and then responsively sending a "launch" message
media by at least	that causes the "Nest Mini" player (which is the claimed "first zone player") to (a) cease operating in
the third zone	accordance with the previously-saved group defined by the "Upstairs" "speaker group" and (b) begin operating
player.	in accordance with the previously-saved group defined by the "Party" "speaker group" such that the "Nest
	Mini" player and the "Home Mini" player (the claimed "third zone player") are configured to coordinate with
	one another to output audio in synchrony:

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Claim 2	Accused Instrumentalities
Claim 2	Another example of this functionality is illustrated by the following screenshots from an example Cast-enabled computing device that is installed with not only the Google Home app, but also Google's YouTube Music app, which show the Cast-enabled computing device receiving a request from a user to launch the second "speaker group" named "Party" (which is the claimed "second zone scene") via the GUI of the YouTube Music app and then responsively sending a "launch" message that causes the "Nest Mini" player (which is the claimed "first
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Claim 2	Accused Instrumentalities
	Episode Epi
	Various other Cast-enabled apps (e.g., Google Play Music and Spotify apps) provide similar functionality. Representative excerpts of Google's source code related to the aforementioned functionality include the source code cited for claim limitation 1.11. Sonos further incorporates by reference Google's response to Sonos's Fact Discovery Interrogatory No. 13, including any of Google's documents or source code cited therein. <i>See</i> Defendant's Objections & Responses to Plaintiff's First Set of Fact Discovery Interrogatories to Defendants.

Claim 3	Accused Instrumentalities
[3.0] The	As described above, each Cast-enabled computing device comprises a "computing device," as recited in claim
computing device	1. Moreover, as described above, each Cast-enabled computing device is programmed to cause storage of the
of claim 1, [3.1]	first zone scene by causing storage of the first zone scene at a location other than the Cast-enabled computing
wherein causing	device.
storage of the first	
zone scene	

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Claim 3	Accused Instrumentalities
comprises causing	For instance, as noted above, based on a request from a user to create a first "speaker group" including the first
storage of the first	Cast-enabled media player and the second Cast-enabled media player in the Cast-enabled playback system
zone scene at a	(which is the claimed "first zone scene"), the Cast-enabled computing device generates data that defines the
location other than	first "speaker group" and transmits a "join_group" message containing that
the computing	data to each of the first and second Cast-enabled media players, which causes each of the first and second Cast-
device, and	enabled media players to store data defining the first "speaker group"
	Thus, by virtue of
	causing storage of data defining the first "speaker group" (which is the claimed "first zone scene") at the first
	and second Cast-enabled media players (which are the claimed "first zone player" and "second zone player"),
	the Cast-enabled computing device causes "storage of the first zone scene at a location other than the [Cast-enabled] computing device." <i>See, e.g.</i> ,
	https://support.google.com/googlenest/answer/7174267?co=GENIE.Platform%3DAndroid&hl=en (providing
	instructions on how to create "speaker groups"); see also limitation 1.6.
	instructions on now to create speaker groups), see uiso ininitation 1.0.
	Notably, this functionality of causing storage of data defining the first "speaker group" at the first and second
	Cast-enabled media players enables other Cast-enabled computing devices and Cast-enabled displays to display
	the first "speaker group" as an available option for playback regardless of whether the Cast-enabled computing
	device or Cast-enabled display was used to create the "speaker group" (and in fact, regardless of whether the
	Cast-enabled computing device or Cast-enabled display was even powered up or connected to the Cast-enabled
	playback system at the time that the "speaker group" was created).
	Representative excerpts of Google's source code related to the aforementioned functionality include the source code cited for claim limitation 1.6.
	Sonos further incorporates by reference Google's response to Sonos's Fact Discovery Interrogatory No. 13,
	including any of Google's documents or source code cited therein. See Defendant's Objections & Responses to
12.21 1	Plaintiff's First Set of Fact Discovery Interrogatories to Defendants.
[3.2] wherein	As described above, each Cast-enabled computing device is programmed to cause storage of the second zone
causing storage of	scene by causing storage of the second zone scene at the location other than the Cast-enabled computing
the second zone	device.
scene comprises	
causing storage of	

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Claim 3	Accused Instrumentalities
the second zone	For instance, based on a request from a user to create a second "speaker group" including the first Cast-enabled
scene at the	media player and the third Cast-enabled media player in the Cast-enabled playback system (which is the
location other than	claimed "second zone scene"), the Cast-enabled computing device generates data that defines the second
the computing	"speaker group" and transmits a "join_group" message containing that data
device.	to each of the first and third Cast-enabled media players, which causes each of the first and third Cast-enabled
	media players to store data defining the second "speaker group"
	Thus, by virtue of causing
	storage of data defining the second "speaker group" (which is the claimed "second zone scene") at the first and
	third Cast-enabled media players (which are the claimed "first zone player" and "third zone player"), the Cast-
	enabled computing device causes "storage of the second zone scene at a location other than the [Cast-enabled] computing device." <i>See, e.g.</i> ,
	https://support.google.com/googlenest/answer/7174267?co=GENIE.Platform%3DAndroid&hl=en (providing
	instructions on how to create "speaker groups"); see also limitation 1.8.
	As noted above, this functionality of causing storage of data defining the second "speaker group" at the first and third Cast-enabled media players enables other Cast-enabled computing devices and Cast-enabled displays to display the second "speaker group" as an available option for playback regardless of whether the Cast-enabled computing device or Cast-enabled display was used to create the "speaker group" (and in fact, regardless of whether the Cast-enabled computing device or Cast-enabled display was even powered up or connected to the Cast-enabled playback system at the time that the "speaker group" was created).
	Representative excerpts of Google's source code related to the aforementioned functionality include the source code cited for claim limitation 1.6.
	Sonos further incorporates by reference Google's response to Sonos's Fact Discovery Interrogatory No. 13, including any of Google's documents or source code cited therein. <i>See</i> Defendant's Objections & Responses to Plaintiff's First Set of Fact Discovery Interrogatories to Defendants.

Claim 4	Accused Instrumentalities
[4.0] The	As described above, each Cast-enabled computing device comprises a "computing device," as recited in claim
computing device	3. Moreover, each Cast-enabled computing device is programmed to cause storage of the first and second zone
of claim 3, [4.1]	

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Claim 4	Accused Instrumentalities
wherein the	scenes by causing storage of the first and second zone scenes at a Cast-enabled media player that is included in
location other than	the previously-saved groups defined by the first and second zone scenes. See claim 3.
the computing	
device comprises a	
zone player of the	
first predefined	
grouping of zone	
players.	

Claim 6	Accused Instrumentalities
[6.0] The	As described above, each Cast-enabled computing device comprises a "computing device," as recited in claim
computing device	1. Moreover, each Cast-enabled computing device is programmed such that, in enabling and causing creation
of claim 1, [6.1]	of a first "speaker group" that includes a first Cast-enabled media player and a second Cast-enabled media
wherein the first	player (which is the claimed "first zone scene" comprising the "first predefined grouping of zone players") and
predefined	a second "speaker group" that includes the first Cast-enabled media player and a third Cast-enabled media
grouping of zone	player (which is the claimed "second zone scene" comprising the "second predefined grouping of zone
players does not	players"), the first "speaker group" need not include the third Cast-enabled media player (which is the claimed
include the third	"third zone player") and the second "speaker group" need not include the second Cast-enabled media player
zone player, and	(which is the claimed "second zone player"). See claim limitations 1.5 and 1.7.
[6.2] wherein the	
second predefined	
grouping of zone	
players does not	
include the second	
zone player.	

Claim 8	Accused Instrumentalities
[8.0] The	As described above, each Cast-enabled computing device comprises a "computing device," as recited in claim
computing device	1. Moreover, as described above, each Cast-enabled computing device is programmed to receive a first request
of claim 1, [8.1]	to create a first zone scene that takes the form of a first set of one or more inputs received via a user interface of
wherein receiving	the Cast-enabled computing device.

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Claim 8	Accused Instrumentalities
the first request	
comprises receiving	For instance, as discussed and shown above in connection with claim limitation 1.5, each Cast-enabled
a first set of one or	computing device is programmed to receive a request from a user to create a first "speaker group" (which
more inputs via a	amounts to the claimed "first request to create a first zone scene") that takes the form of a set of one or more
user interface of the	inputs received via a GUI of the Google Home app running on the Cast-enabled computing device.
computing device,	
[8.2] wherein	As described above, each Cast-enabled computing device is programmed to receive a second request to create a
receiving the	second zone scene that takes the form of a second set of one or more inputs received via the user interface.
second request	
comprises receiving	For instance, as discussed and shown above in connection with claim limitation 1.7, each Cast-enabled
a second set of one	computing device is programmed to receive a request from a user to create a second "speaker group" (which
or more inputs via	amounts to the claimed "second request to create a second zone scene") that takes the form of a set of one or
the user interface,	more inputs received via the GUI of the Google Home app running on the Cast-enabled computing device.
and	
[8.3] wherein	As described above, each Cast-enabled computing device is programmed to receive a third request to invoke
receiving the third	the first zone scene that takes the form of a third set of one or more inputs received via the user interface.
request comprises	
receiving a third set	For instance, as discussed and shown above in connection with claim limitation 1.10, each Cast-enabled
of one or more	computing device is programmed to receive a request from a user to launch the first "speaker group" (which
inputs via the user	amounts to the claimed "third request to invoke the first zone scene") that takes the form of a set of one or more
interface.	inputs received via the GUI of the Google Home app running on the Cast-enabled computing device.

Claim 9	Accused Instrumentalities
[9.0] A non-	Google's "Cast" technology enables Cast-enabled media players to be included in a "speaker group" "for
transitory	synchronous music throughout the home." These Cast-enabled media players include Google's own Cast-
computer-readable	enabled media players, such as the Home Mini, Nest Mini, Home, Home Max, Home Hub, Nest Hub, Nest Hub
medium, wherein	Max, Nest Wifi Point, Chromecast, Chromecast Audio, Chromecast Ultra, Chromecast with Google TV, and
the non-transitory	Nest Audio media players, as well as various other third-party media players with built-in Cast functionality.
computer-readable	See, e.g., https://store.google.com/us/product/google_home_max?hl=en-US;
medium is	https://store.google.com/us/product/chromecast_google_tv_compare?hl=en-US;
provisioned with	https://www.google.com/chromecast/built-in/audio/.
program	

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Claim 9	Accused Instrumentalities
instructions that are	To facilitate this functionality, the Google Home app allows a user to "[c]reate and manage speaker groups"
executable to cause	from the user's smartphone, tablet, or computer device, as well as to "cast" to a previously-created "speaker
a computing device	group" from the user's smartphone, tablet, or computer device, which would cause the "speaker group" to be
to perform	invoked. https://support.google.com/googlenest/answer/7174267?co=GENIE.Platform%3DAndroid&hl=en.
functions	In addition, there are many other Cast-enabled Android, iOS, Chrome, or browser-based apps that allow a user
comprising:	to "cast" to a previously-created "speaker group" (and thereby cause the "speaker group" to be launched) using
	the user's smartphone, tablet, or computer device, including certain of Google's own Cast-enabled apps (e.g.,
	YouTube Music app, the Google Play Music app, the Google Podcasts app, etc.) as well as certain third-party
	Cast-enabled apps (e.g., the Spotify app), accessed via an app store or Chromecast-enabled site URL. The
	Google Home app, either alone or together with one or more of these other Cast-enabled apps, can be installed
	and run on any smartphone, tablet, or computer device that supports Android, iOS, Chrome, or browser-based
	apps, including Google's own "Pixel" smartphone, tablet, and computer devices (<i>e.g.</i> , the Pixel 3, Pixel 3 XL, Pixel 3a, Pixel 3a XL, Pixel 4 XL, Pixel 4a, Pixel 4a (5G), Pixel 5, Pixel 5a (5G), Pixel 6 phones, the
	Pixel Sa, Pixel Sa AL, Pixel 4 AL, Pixel 4a, Pixel 4a (SG), Pixel Sa (SG), Pixel 6 phones, the Pixel Slate tablet, and the Pixelbook and Pixelbook Go laptops) as well as many third-party smartphone, tablet,
	or computer device. See, e.g., https://store.google.com/us/magazine/compare_pixel ;
	https://store.google.com/us/product/google pixelbook specs;
	https://store.google.com/us/product/pixel_slate_specs. For purposes of this chart, any smartphone, tablet, or
	computer device installed with the Google Home app, either alone or together with one or more of these other
	Cast-enabled apps, will be referred to as a "Cast-enabled computing device."
	cust charge upps, while or reterior to the charge companing activities
	As set out in the Supplemental Infringement Contentions, Sonos has endeavored to list the possible third-party
	smartphone, tablet, and computer devices that may have been used to download and install the Google Home
	app between November 2019 to present. See Appx. 1. Each of these third-party smartphone, tablet, and
	computer devices, when installed with the Google Home app, meets all elements of the claims as explained in
	more detail herein. As set forth below, Sonos cites representative examples of Google smartphone, tablet, and
	computer devices that comprises a tangible, non-transitory computer-readable storage medium that, when
	installed with the Google Home app, includes executable instructions that when executed by a processor causes
	the device to carry out the recited functions, but notes that a tangible, non-transitory computer-readable storage
	medium has become ubiquitous among all smartphone, tablet, and computer devices. Each possible third-party
	smartphone, tablet, and computer device listed in Appendix 1 contains this aspect and thus meets this element.

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Claim 9	Accused Instrumentalities
	Certain of the aforementioned Cast-enabled media players also include a display screen and software that
	enables these Cast-enabled media players to additionally function as a control device for other Cast-enabled
	media players. This sub-category of Cast-enabled media players, which will be referred to herein as "Cast-
	enabled displays," includes Google's Home Hub, Nest Hub, and Nest Hub Max media players. <i>See, e.g.</i> , https://store.google.com/us/product/google_nest_hub?hl=en-US#overview-modal-music;
	https://store.google.com/us/product/google_nest_nub?m=en-US#overview-modai-music; https://store.google.com/us/product/google_nest_hub_max?hl=en-US;
	https://support.google.com/googlenest/answer/9165738?hl=en-GB&ref topic=7030084. Similar to the Cast-
	enabled apps installed on the Cast-enabled computing devices, the software installed on these Cast-enabled
	displays allows a user to "cast" to a previously-created "speaker group" using the Cast-enabled display's user
	interface.
	As described in further detail, each Cast-enabled computing device is a "controller" that comprises a non-
	transitory computer-readable medium provisioned with program instructions that, when executed by the Cast-
	enabled computing device's processor, cause the Cast-enabled computing device to perform the functions
	recited in claim 9. Further, each server that hosts the Google Home app for download onto Cast-enabled
	computing devices, which is referred to herein as a "Cast-enabled app download server," comprises a non-
	transitory computer-readable medium provisioned with program instructions that, when executed by a Cast-
	enabled computing device's processor, cause the Cast-enabled computing device to perform the functions
	recited in claim 9. Further yet, because each Cast-enabled media player is a data network device (i.e., a device
	that is configured to connect to and communicate over a medium that interconnects devices in a manner that enables them to send digital data packets to and receive digital data packets from each other) and is configured
	to process and output audio, each Cast-enabled media player comprises a "zone player" as recited in claim 9.
	See, e.g., Pl.'s Opening Markman Br. (D.I. 60 of 20-cv-881-ADA) at pp. 4-6, 23-26, Exs. 24-25; Pl.'s Reply
	Markman Br. (D.I. 66 of 20-cv-881-ADA) at pp. 2-3, 10-12, Exs. 26-27; SONOS-SVG2-00018184 - SONOS-
	SVG2-00018236 [ITC Order No. 20] at p. 15; https://support.google.com/googlenest/answer/7072284?hl=en;
	https://support.google.com/chromecast/answer/3046409?hl=en;
	https://store.google.com/us/product/nest_wifi_specs?hl=en-US.
[9.1] while serving	Each Cast-enabled computing device and each Cast-enabled app download server comprises a non-transitory
as a controller for a	computer-readable medium provisioned with program instructions that, when executed by a Cast-enabled
networked media	computing device's processor, cause the Cast-enabled computing device to, while serving as a controller for a
playback system	Cast-enabled playback system comprising a first Cast-enabled media player and at least two other Cast-enabled
comprising a first	media players, where the first Cast-enabled media player is operating in a standalone mode in which the first

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Claim 9	Accused Instrumentalities
zone player and at	Cast-enabled media player is configured to play back media individually, perform the functions identified
least two other zone	below. See claim limitation 1.4.
players, wherein the	
first zone player is	
operating in a	
standalone mode in	
which the first zone	
player is configured	
to play back media	
individually:	
[9.2] receiving a	Each Cast-enabled computing device and each Cast-enabled app download server comprises a non-transitory
first request to	computer-readable medium provisioned with program instructions that, when executed by a Cast-enabled
create a first zone	computing device's processor, cause the Cast-enabled computing device to receive a first request to create a
scene comprising a	first zone scene comprising a first predefined grouping of Cast-enabled media players including at least the first
first predefined	Cast-enabled media player and a second Cast-enabled media player that are to be configured for synchronous
grouping of zone	playback of media when the first zone scene is invoked. See claim limitation 1.5.
players including at	
least the first zone	
player and a second	
zone player that are	
to be configured for	
synchronous	
playback of media	
when the first zone	
scene is invoked;	
[9.3] based on the	Each Cast-enabled computing device and each Cast-enabled app download server comprises a non-transitory
first request, i)	computer-readable medium provisioned with program instructions that, when executed by a Cast-enabled
causing creation of	computing device's processor, cause the Cast-enabled computing device to, based on the first request, (i) cause
the first zone scene,	creation of the first zone scene, (ii) cause an indication of the first zone scene to be transmitted to the first Cast-
ii) causing an	enabled media player, and (iii) cause storage of the first zone scene. See claim limitation 1.6.
indication of the	
first zone scene to	

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Accused Instrumentalities
Each Cast-enabled computing device and each Cast-enabled app download server comprises a non-transitory
computer-readable medium provisioned with program instructions that, when executed by a Cast-enabled
computing device's processor, cause the Cast-enabled computing device to receive a second request to create a
second zone scene comprising a second predefined grouping of Cast-enabled media players including at least
the first Cast-enabled media player and a third Cast-enabled media player that are to be configured for
synchronous playback of media when the second zone scene is invoked, where the third Cast-enabled media
player is different than the second Cast-enabled media player. See claim limitation 1.7.
Each Cast-enabled computing device and each Cast-enabled app download server comprises a non-transitory
computer-readable medium provisioned with program instructions that, when executed by a Cast-enabled
computing device's processor, cause the Cast-enabled computing device to, based on the second request, (i)
cause creation of the second zone scene, (ii) cause an indication of the second zone scene to be transmitted to
the first Cast-enabled media player, and (iii) cause storage of the second zone scene. See claim limitation 1.8.
the first cast chaored media player, and (iii) cause storage of the second zone seems. See claim minuation 1.6.

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Claim 9	Accused Instrumentalities
second zone scene	
to be transmitted to	
the first zone	
player, and iii)	
causing storage of	
the second zone	
scene;	
[9.6] displaying a	Each Cast-enabled computing device and each Cast-enabled app download server comprises a non-transitory
representation of	computer-readable medium provisioned with program instructions that, when executed by a Cast-enabled
the first zone scene	computing device's processor, cause the Cast-enabled computing device to display a representation of the first
and a representation	zone scene and a representation of the second zone scene. See claim limitation 1.9.
of the second zone	
scene; and	
[9.7] while	Each Cast-enabled computing device and each Cast-enabled app download server comprises a non-transitory
displaying the	computer-readable medium provisioned with program instructions that, when executed by a Cast-enabled
representation of	computing device's processor, cause the Cast-enabled computing device to, while displaying the representation
the first zone scene	of the first zone scene and the representation of the second zone scene, receive a third request to invoke the first
and the	zone scene. See claim limitation 1.10.
representation of	
the second zone	
scene, receiving a	
third request to	
invoke the first	
zone scene; and	
[9.8] based on the	Each Cast-enabled computing device and each Cast-enabled app download server comprises a non-transitory
third request,	computer-readable medium provisioned with program instructions that, when executed by a Cast-enabled
causing the first	computing device's processor, cause the Cast-enabled computing device to, based on the third request, cause
zone player to	the first Cast-enabled media player to transition from operating in the standalone mode to operating in
transition from	accordance with the first predefined grouping of Cast-enabled media players such that the first Cast-enabled
operating in the	media player is configured to coordinate with at least the second Cast-enabled media player to output media in
standalone mode to	synchrony with output of media by at least the second Cast-enabled media player. See claim limitation 1.11.
operating in	

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Claim 9	Accused Instrumentalities
accordance with the	
first predefined	
grouping of zone	
players such that	
the first zone player	
is configured to	
coordinate with at	
least the second	
zone player to	
output media in	
synchrony with	
output of media by	
at least the second	
zone player.	

Claim 10	Accused Instrumentalities
[10.0] The non-	As described above, each Cast-enabled computing device and each Cast-enabled app download server
transitory	comprises a "non-transitory computer-readable medium," as recited in claim 9. Moreover, in accordance with
computer-readable	the program instructions, each Cast-enabled computing device comprises a non-transitory computer-readable
medium of claim 9,	medium provisioned with program instructions that, when executed by the Cast-enabled computing device,
wherein the non-	cause the Cast-enabled computing device to perform the functions identified below. <i>See</i> claim limitation 2.0.
transitory	
computer-readable	
medium is also	
provisioned with	
program	
instructions stored	
on the non-	
transitory	
computer-readable	
medium that, when	
executed by the one	

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Claim 10	Accused Instrumentalities
or more processors,	
cause the	
computing device	
to perform	
functions	
comprising:	
[10.1] while the	Each Cast-enabled computing device and each Cast-enabled app download server comprises a non-transitory
first zone player is	computer-readable medium provisioned with program instructions that, when executed by a Cast-enabled
configured to	computing device's processor, cause the Cast-enabled computing device to, while the first Cast-enabled media
coordinate with at	player is configured to coordinate with at least the second Cast-enabled media player to play back media in
least the second	synchrony with at least the second Cast-enabled media player, receive a fourth request to invoke the second
zone player to play	zone scene. See claim limitation 2.1.
back media in	
synchrony with at	
least the second	
zone player,	
receiving a fourth	
request to invoke	
the second zone	
scene; and	
[10.2] based on the	Each Cast-enabled computing device and each Cast-enabled app download server comprises a non-transitory
fourth request,	computer-readable medium provisioned with program instructions that, when executed by a Cast-enabled
causing the first	computing device's processor, cause the Cast-enabled computing device to, based on the fourth request, cause
zone player to (a)	the first Cast-enabled media player to (a) cease to operate in accordance with the first predefined grouping of
cease to operate in	Cast-enabled media players such that the first Cast-enabled media player is no longer configured to coordinate
accordance with the	with at least the second Cast-enabled media player to output media in synchrony with output of media by at
first predefined	least the second Cast-enabled media player and (b) begin to operate in accordance with the second predefined
grouping of zone	grouping of Cast-enabled media players such that the first Cast-enabled media player is configured to
players such that	coordinate with at least the third Cast-enabled media player to output media in synchrony with output of media
the first zone player	by at least the third Cast-enabled media player. See claim limitation 2.2.
is no longer	
configured to	

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Claim 10	Accused Instrumentalities
coordinate with at	
least the second	
zone player to	
output media in	
synchrony with	
output of media by	
at least the second	
zone player and (b)	
begin to operate in	
accordance with the	
second predefined	
grouping of zone	
players such that	
the first zone player	
is configured to	
coordinate with at	
least the third zone	
player to output	
media in synchrony	
with output of	
media by at least	
the third zone	
player.	

Claim 11	Accused Instrumentalities
[11.0] The non-	As described above, each Cast-enabled computing device and each Cast-enabled app download server
transitory	comprises a "non-transitory computer-readable medium," as recited in claim 9. Moreover, in accordance with
computer-readable	the program instructions, each Cast-enabled computing device is programmed to cause storage of the first zone
medium of claim 9,	scene by causing storage of the first zone scene at a location other than the Cast-enabled computing device. See
[11.1] wherein	claim limitation 3.1.
causing storage of	
the first zone scene	

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Claim 11	Accused Instrumentalities
comprises causing	
storage of the first	
zone scene at a	
location other than	
the computing	
device, and	
[11.2] wherein	In accordance with the program instructions, each Cast-enabled computing device is programmed to cause
causing storage of	storage of the second zone scene by causing storage of the second zone scene at the location other than the
the second zone	Cast-enabled computing device. <i>See</i> claim limitation 3.2.
scene comprises	
causing storage of	
the second zone	
scene at the	
location other than	
the computing	
device.	

Claim 12	Accused Instrumentalities
[12.0] The non-	As described above, each Cast-enabled computing device and each Cast-enabled app download server
transitory	comprises a "non-transitory computer-readable medium," as recited in claim 11. Moreover, in accordance with
computer-readable	the program instructions, each Cast-enabled computing device is programmed to cause storage of the first and
medium of claim	second zone scenes by causing storage of the first and second zone scenes at the first Cast-enabled media player
11, [12.1] wherein	that is included in the previously-saved groups defined by the first and second zone scenes. <i>See</i> claim 4.
the location other	
than the computing	
device comprises a	
zone player of the	
first predefined	
grouping of zone	
players.	

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Claim 14	Accused Instrumentalities
[14.0] The non-	As described above, each Cast-enabled computing device and each Cast-enabled app download server
transitory	comprises a "non-transitory computer-readable medium," as recited in claim 9. Moreover, in accordance with
computer-readable	the program instructions, each Cast-enabled computing device is programmed such that, in enabling and
medium of claim 9,	causing creation of a first "speaker group" that includes a first Cast-enabled media player and a second Cast-
[14.1] wherein the	enabled media player (which is the claimed "first zone scene" comprising the "first predefined grouping of
first predefined	zone players") and a second "speaker group" that includes the first Cast-enabled media player and a third Cast-
grouping of zone	enabled media player (which is the claimed "second zone scene" comprising the "second predefined grouping
players does not	of zone players"), the first "speaker group" need not include the third Cast-enabled media player (which is the
include the third	claimed "third zone player") and the second "speaker group" need not include the second Cast-enabled media
zone player, and	player (which is the claimed "second zone player"). See claim limitations 6.0-6.2.
[14.2] wherein the	
second predefined	
grouping of zone	
players does not	
include the second	
zone player.	

Claim 16	Accused Instrumentalities
[16.0] The non-	As described above, each Cast-enabled computing device and each Cast-enabled app download server
transitory	comprises a "non-transitory computer-readable medium," as recited in claim 9. Moreover, in accordance with
computer-readable	the program instructions, each Cast-enabled computing device is programmed to receive a first request to create
medium of claim 9,	a first zone scene that takes the form of a first set of one or more inputs received via a user interface of the
[16.1] wherein	Cast-enabled computing device. <i>See</i> claim limitation 8.1.
receiving the first	
request comprises	
receiving a first set	
of one or more	
inputs via a user	
interface of the	
computing device,	

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Claim 16	Accused Instrumentalities
[16.2] wherein	In accordance with the program instructions, each Cast-enabled computing device is programmed to receive a
receiving the	second request to create a second zone scene that takes the form of a second set of one or more inputs received
second request	via the user interface. See claim limitation 8.2.
comprises receiving	
a second set of one	
or more inputs via	
the user interface,	
and	
[16.3] wherein	In accordance with the program instructions, each Cast-enabled computing device is programmed to receive a
receiving the third	third request to invoke the first zone scene that takes the form of a third set of one or more inputs received via
request comprises	the user interface. See claim limitation 8.3.
receiving a third set	
of one or more	
inputs via the user	
interface.	